



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,331	06/09/2000	RUDIGER ROPPEL	10191/1321	5174
26646	7590	08/11/2004	EXAMINER	
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			LE, DUY K	
			ART UNIT	PAPER NUMBER
			2685	( )

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/508,331

Applicant(s)

ROPPEL ET AL.

Examiner

Duy K Le

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 9-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is in response to amendment filed on May 21, 2004.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 9-10 and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakurai (U.S. Patent 4,531,232).

As to claim 9, Figure 4 in Sakurai shows a receiver (12) (“the radio receiver 12 comprises a tuner circuit 13 for selecting a desired radio wave signal from the radio wave signals received by the antenna element 11, a high-frequency amplifier circuit 19 for amplifying the reception signal selected by the tuner circuit 13, and an audio signal converter 14” (Col. 3, line 65 to Col. 4, line 2)) comprising:

at least one electrical component (15) (“the tuner circuit 13 and the audio signal converter 14 are controlled by control signals from a control unit 15” (Col. 4, lines 6-8));

an antenna (11) having a base (20) (“the antenna element 11 is directly connected to an input end of a tuner circuit 13 of a radio receiver 12, without using a coaxial cable” (Col. 3, lines 63-65). “The radio receiver 12 and the antenna extension/retraction mechanism are mounted in a single casing and constitute a reception section 20” (Col. 4, lines 28-30). See also Figure 5); and

Art Unit: 2685

a tuner (13) connected to the antenna (11), the tuner being situated in the base of the antenna ("the antenna element 11 is directly connected to an input end of a tuner circuit 13 of a radio receiver 12, without using a coaxial cable" (Col. 3, lines 63-65). "The radio receiver 12 and the antenna extension/retraction mechanism are mounted in a single casing and constitute a reception section 20" (Col. 4, lines 28-30). See also Figure 5), the tuner being spatially separated from the at least one electrical component, the tuner having at least one terminal for connecting the tuner to at least one of: (a) the at least one electrical component (15) ("the tuner circuit 13 and the audio signal converter 14 are controlled by control signals from a control unit 15" (Col. 4, lines 6-8)), and (b) at least one further component external to the receiver (16) ("the control unit 15, in turn, receives tuning, volume and tone operating signals from an operation section 16 which is separated from the radio receiver 12" (Col. 4, lines 12-15)), wherein the base includes a surface for mounting the base to an exterior surface of a motor vehicle (see Col. 4, lines 55-63 and Figure 6. The housing 29 is the base that includes a surface and thus has the structural elements as cited in the claim. In Figure 6 of the reference, the housing 29 is shown to be mounted under the car body 21 (similar to an embodiment described on page 3, lines 25-28 of the applicant specification). It is inherent that housing 29 can <sup>contain a surface that</sup> ~~also~~ functionally be mounted to an exterior surface of a motor vehicle).

As to claims 10 and 16, the Sakurai reference discloses the receiver is a radio receiver for the motor vehicle ("the present invention relates to a radio receiver apparatus mounted in a vehicle such as a passenger car" (Col. 1, lines 6-7)).

As to claim 13, the Sakurai reference discloses the receiver according to claim 9, wherein the at least one electrical component includes an operator control, the tuner being connected to

Art Unit: 2685

the operator control via the at least one terminal (“the tuner circuit 13 and the audio signal converter 14 are controlled by control signals from a control unit 15” (Col. 4, lines 6-8). “The control unit 15, in turn, receives tuning, volume and tone operating signals from an operation section 16 which is separated from the radio receiver 12. These operating signals and so on correspond to corresponding control knobs and buttons 161, 162, ...” (Col. 4, lines 12-17)).

As to claim 14, the Sakurai reference discloses the receiver according to claim 9, wherein the tuner has a further terminal for transmitting useful data (“the radio receiver 12 comprises a tuner circuit 13 for selecting a desired radio wave signal from the radio wave signals received by the antenna element 11, a high-frequency amplifier circuit 19 for amplifying the reception signal selected by the tuner circuit 13, and an audio signal converter 14” (Col. 3, line 65 to Col. 4, line 2)), wherein the at least one electrical component includes an operator control, and wherein the further terminal connects the tuner to the operator control (“the tuner circuit 13 and the audio signal converter 14 are controlled by control signals from a control unit 15” (Col. 4, lines 6-8). “The control unit 15, in turn, receives tuning, volume and tone operating signals from an operation section 16 which is separated from the radio receiver 12. These operating signals and so on correspond to corresponding control knobs and buttons 161, 162, ...” (Col. 4, lines 12-17)).

As to claim 15, Figure 4 in Sakurai shows a tuner (13) for a receiver (12), the receiver having an antenna (11) and at least one electrical component (15), the antenna having a base (20) provided with a surface for mounting the base to an exterior surface of a motor vehicle (see Col. 4, lines 55-63 and Figure 6. The housing 29 is the base that includes a surface and thus has the structural elements as cited in the claim. In Figure 6 of the reference, the housing 29 is shown to

Art Unit: 2685

be mounted under the car body 21 (similar to an embodiment described on page 3, lines 25-28 of the applicant specification). It is inherent that housing 29 can also functionally be mounted to an exterior surface of a motor vehicle), the tuner comprising:

a tuner device situated in the base of the antenna (“the antenna element 11 is directly connected to an input end of a tuner circuit 13 of a radio receiver 12, without using a coaxial cable” (Col. 3, lines 63-65). “The radio receiver 12 and the antenna extension/retraction mechanism are mounted in a single casing and constitute a reception section 20” (Col. 4, lines 28-30). See also Figure 5) at a location that is between the antenna and the surface (see Col. 4, lines 55-63 and Figure 6. The housing 29 is the base that includes a surface. Metal casing 31 that contains the radio receiver 12 is located between housing 29 and the antenna); and

at least one terminal for connecting the tuner to the at least one electrical component of the receiver (“the tuner circuit 13 and the audio signal converter 14 are controlled by control signals from a control unit 15” (Col. 4, lines 6-8)).

As to claim 17, the Sakurai reference discloses the tuner according to claim 15, wherein the tuner device is detachably situated in the base of the antenna (“the antenna element 11 is directly connected to an input end of a tuner circuit 13 of a radio receiver 12, without using a coaxial cable” (Col. 3, lines 63-65). “The radio receiver 12 and the antenna extension/retraction mechanism are mounted in a single casing and constitute a reception section 20” (Col. 4, lines 28-30). “As shown in FIG. 5, when the antenna element 11 is installed at the trunk portion of a car body 21, the reception section 20 is fixed inside the trunk” (Col. 4, lines 31-33)).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11-12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,531,232 to Sakurai in view of Reams (U.S. Patent 5,907,793).

As to claim 11, the Sakurai reference discloses the receiver according to claim 9.

However, it does not expressly disclose the tuner includes a bus interface and a microcontroller, the bus interface being connected to the microcontroller and to the at least one terminal for transmitting control data. The Reams reference teaches the tuner includes a bus interface and a microcontroller, the bus interface being connected to the microcontroller and to the at least one terminal for transmitting control data ("said RDPU may be built into broadcast radio consumer tuner 13, telephone communications device 30 (wired or cellular) or it may be a separate module either connected to telephone communications device 30 or with built-in transceiver capability" (Col. 16, lines 14-18). "In said integrated data-receiver tuner 13/telephone communications device 30, said RDPU may share any and all RDPU means including power source means, display means (LED 22, 23 or 24 or LCD), response means (pushbutton 22, 23 or 24, key pad or VRU), DTMF signaling system for said response means, automatic dialing means, speech synthesize 28, memory scroll means, mute/attenuation means or other means in said telephone device 30" (Col. 13, lines 8-16). Figure 1 shows the RDPU and its elements).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the receiver of Sakurai wherein the tuner includes a bus

interface and a microcontroller, the bus interface being connected to the microcontroller and to the at least one terminal for transmitting control data, as taught by Reams, in order to connect the tuner to a communications device.

As to claim 12, the Sakurai reference discloses the receiver according to claim 9, wherein the tuner includes: a further terminal for transmitting useful data ("the radio receiver 12 comprises a tuner circuit 13 for selecting a desired radio wave signal from the radio wave signals received by the antenna element 11, a high-frequency amplifier circuit 19 for amplifying the reception signal selected by the tuner circuit 13, and an audio signal converter 14" (Col. 3, line 65 to Col. 4, line 2)). However, it does not disclose the tuner includes an encoding circuit; an interface circuit connecting the further terminal to the encoding circuit; and a further tuner component connected to the encoding circuit. The Reams reference teaches the tuner includes an encoding circuit; an interface circuit connecting the further terminal to the encoding circuit; and a further tuner component connected to the encoding circuit ("said RDPU may be built into broadcast radio consumer tuner 13, telephone communications device 30 (wired or cellular) or it may be a separate module either connected to telephone communications device 30 or with built-in transceiver capability" (Col. 16, lines 14-18). Figure 1 shows a tuner component 13 connected to an interface circuit 15 that is connected to a microprocessor 16 that is connected to speech synthesizer 28. "Said VRU response means may be integrated with speech synthesizer 28 to provide an integrated conventional voice input/output system sharing an LPC-based voice coding design. Under this embodiment, LPC encoded voice signals are sent in said at least one source data set by said respective broadcast or cable radio or television data transmission means" (Col. 9, lines 33-39). As interpreted by examiner, speech synthesizer 28 includes an encoding circuit).



Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the receiver of Sakurai wherein the tuner includes an encoding circuit; an interface circuit connecting the further terminal to the encoding circuit; and a further tuner component connected to the encoding circuit, as taught by Reams, in order to encode data being sent by broadcast or cable radio or television data transmission means.

As to claim 18, the Sakurai reference discloses the tuner according to claim 15, further comprising at least one of: means for receiving radio signals (“the radio receiver 12 comprises a tuner circuit 13 for selecting a desired radio wave signal from the radio wave signals received by the antenna element 11, a high-frequency amplifier circuit 19 for amplifying the reception signal selected by the tuner circuit 13, and an audio signal converter 14” (Col. 3, line 65 to Col. 4, line 2)). However, it does not disclose the tuner comprises of means for transmitting and receiving mobile telephone signals; and means for receiving navigational data transmitted according to a GPS standard. The Reams reference teaches the tuner comprises of means for transmitting and receiving mobile telephone signals (“in one preferred embodiment data receiver-tuner 13 (radio or television) is built into telephone communications device 30 – to enhance the value of telephone communications device 30 to consumers” (Col. 12, lines 53-56). “For example, data receive-tuner 13 may be built into a broadband cellular radio telephone providing full, three response option interactive functionality” (Col. 12, lines 61-63)); and means for receiving navigational data transmitted according to a GPS standard (“location sensing and TTL interface circuitry tuner 13 may be coupled to location sensing device (not shown) such as zip code location identifier for fixed RDPU units and for mobile RDPU units GPS or LORAN C receiver

or cellular radio location means. Said location sensing device may be used for any locator purpose” (Col. 17, lines 50-55)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tuner of Sakurai to further comprise means for transmitting and receiving mobile telephone signals; and means for receiving navigational data transmitted according to a GPS standard, as taught by Reams, in order to provide interactive functionality and locator purpose.

### ***Response to Arguments***

6. Applicant's arguments filed May 21, 2004 have been fully considered but they are not persuasive.

With respect to the newly amended independent claims 9 and 15, examiner refers to what is cited in the Office action.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 2685


will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy K Le whose telephone number is 703-305-5660. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F Urban can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Duy Le  
August 6, 2004

  
EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600